

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM  
 WASTE DISCHARGE PERMIT**

Department of Environmental Quality  
 2020 S.W. Fourth Avenue, Suite 400, Portland, OR 97201-4987  
 Telephone: (503) 229-5263

Issued pursuant to ORS 468B.050 and The Federal Clean Water Act

**ISSUED TO:**

City of Portland  
 1120 S.W. Fifth Avenue  
 Portland, Oregon 97204

**SOURCES COVERED BY THIS PERMIT**

<u>Type of Waste</u>	<u>Outfall No.</u>	<u>Outfall Location</u>
Treated Municipal Sewage	001	R.M. 105.5 (Col. R.)
Treated Municipal Sewage- Emergency Relief	002.0, 002.1, 002.2	Or. Slough, Col. Slough, Col. R. R.M. 105.5 (Col. R.)
Treated Municipal Sewage	003	R.M. 105.6 (Col. R.)
Combined Sewer Overflows (CSOs)	004-039	(See list below)
Sewer System Overflows (SSOs)	040-060	(See list below)
Treated Municipal Sewage	099	Off-site Reclaimed Water

**CSOs/Outfalls:**

SW California Street	004/1 (Willamette River)	SE Oak Street	022/38 (Willamette River)
SW Carolina Street	005/3 (Willamette River)	NE Glisan Street	023/40 (Willamette River)
SW Sheridan Street	006/7B (Willamette River)	NE Holladay Street	024/41 (Willamette River)
Ankeny Pump Station	007/9 (Willamette River)	N Wheeler Place	025/43 (Willamette River)
NW Nicolai Street	008/15 (Willamette River)	N Randolph Avenue	026/44A (Willamette River)
NW 29th Ave./Balch Gulch	009/17 (Willamette River)	N Beech Street	027/46 (Willamette River)
NW 110th Avenue	010/24 (Willamette River)	Riverside (Swan Island)	028/47 (Willamette River)
SE Clatsop Street	011/26 (Willamette River)	N Alta Avenue	029/52 (Willamette River)
Garthwick (Waverly)	012/26A (Willamette River)	N Reno Avenue	030/53 (Willamette River)
SE Umatilla Street	013/27 (Willamette River)	N James Street	031/54 (Columbia Slough)
SE Insley Street	014/28 (Willamette River)	N Oswego Avenue	032/55 (Columbia Slough)
SE Taggart Street	015/30 (Willamette River)	N Oregonian Avenue	033/56 (Columbia Slough)
SE Division Place	016/31 (Willamette River)	N Fiske Avenue	034/57 (Columbia Slough)
SE Clay Street	017/33 (Willamette River)	N Chautauqua Place	035/58 (Columbia Slough)
SE Hawthorne Boulevard	018/34 (Willamette River)	N Bayard Avenue	036/59 (Columbia Slough)
SE Yamhill Street	019/35 (Willamette River)	N Delaware Avenue	037/60 (Columbia Slough)
SE Alder Street	020/36 (Willamette River)	N Albina Avenue	038/62&62A (Columbia Slough)
SE Stark Street	021/37 (Willamette River)	NE 13th Avenue	039/65 (Columbia Slough)

Note: Where two outfall numbers are listed for a combined sewer overflow, the first outfall number is that assigned by the Department for the permit and the second outfall number is that used by the City of Portland in their historical data base.

SSOs/Outfalls (Pump Station name):

5001 NE 122nd(Inverness)	040 (Columbia Slough)	0757 SW Miles (Miles Place)	051 (Willamette River)
4429 NE 158th (158th)	041 (Columbia Slough)	6300 N Basin (Mocks Bottom)	052 (Willamette River)
7544 NE 33rd (33rd Dr)	042 (Columbia Slough)	1250 N Columbia (Montana)	053 (Columbia Slough)
2520 N Larrabee (Albina)	043 (Willamette River)	10615 N Oregonian (Oregonian)	054 (Columbia Slough)
56 SE Alder (Alder)	044 (Willamette River)	11733 N Columbia (Refuse Disposal)	055 (Columbia Slough)
7110 NW Front (Guilds Lake)	045 (Willamette River)	13244 N Rivergate (Rivergate)	056 (Willamette River)
2033 SE Harney (Harney)	046 (Johnson Creek)	11966 N Edison (Shipyard)	057 (Willamette River)
5612 SW Macadam (John's Landing)	047 (Willamette River)	8690 N Bradford (St. Johns)	058 (Willamette River)
10909 NW Front (Linnton)	048 (Willamette River)	2600 N Going (Swan Island)	059 (Willamette River)
12902 N Lombard (Lombard)	049 (Columbia Slough)	532 SE Umatilla (Umatilla)	060 (Willamette River)
8030 NE Mallory (Mallory)	050 (Columbia Slough)		

**PLANT TYPE AND LOCATION:**

Activated Sludge Secondary Wastewater Treatment Plant and  
Wet Weather Primary Treatment Facility  
5001 N. Columbia Boulevard  
Portland , Oregon.  
**Treatment System Class: IV**  
**Collection System Class: IV**  
EPA REFERENCE NO : OR 002690-5

**RECEIVING STREAM INFORMATION:**

Basin: Willamette  
Sub-Basin: Lower Columbia/Willamette  
Receiving Stream: Columbia River  
Hydro Code: 10--COLU 105.5 D  
County: Multnomah  
LLID: 1240483462464

Issued in response to Renewal Application No. 985931 received May 6, 2002 and as revised November 8, 2005.

\_\_\_\_\_  
Greg Geist, Water Quality Manager  
Northwest Region

\_\_\_\_\_  
Date

**PERMITTED ACTIVITIES**

Until this permit expires or is modified or revoked or administratively extended the permittee is authorized to construct, install, modify or operate a wastewater collection, treatment, control and disposal system and discharge to public waters adequately treated wastewater and treated storm water only from the authorized discharge point or points established in Schedule A and only in conformance with all the requirements, limitations, and conditions set forth in the attached schedules as follows:

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Unless specifically authorized by this permit, by another NPDES or WPCF permit, or by Oregon Administrative Rule, any other direct or indirect discharge to waters of the state is prohibited, including discharge to an underground injection control system.

## SCHEDULE A

### Waste Discharge Limitations not to be exceeded after permit issuance

1. Outfalls Number 001 and 003 (Columbia Boulevard Wastewater Treatment Plant [CBWTP] and Columbia Boulevard Wet Weather Treatment Facility [CBWWTF]):

### **Columbia Boulevard Wastewater Treatment Plant [CBWTP] – Secondary Treatment Facility**

Parameters	Limitations				
	<u>Average Effluent Concentrations</u> (See Note 1)		<u>Mass Loading*</u>		
	Monthly	Weekly	Monthly Average lb/day	Weekly Averages lb/day	Daily Maximum lbs
Biochemical Oxygen Demand (BOD5)	30 mg/L	45 mg/L	25,000	37,500	50,000
Total Suspended Solids (TSS)	30 mg/L	45 mg/L	25,000	37,500	50,000
pH	Shall be within the range of 6.0 - 9.0 s.u.				
Total Residual Chlorine	Shall not exceed 1.0 mg/L**				
Escherichia coli ( <i>E. coli</i> )	Monthly log mean of 126 organisms per 100 ml and no single sample shall exceed 406 organisms per 100 ml. If a single sample exceeds 406 organisms per 100 ml, additional sampling per Schedule B is mandated.				
BOD5 and TSS percent removal efficiency	<i>May 1 through October 31</i>		<i>November 1 through April 30</i>		
	Shall not be less than 85 percent monthly average		When because of precipitation events, the total flow entering the treatment facility exceeds 100 MGD, the percentage of BOD5 and TSS removed may be less than 85 percent. During these periods, the treatment facility shall be operated as efficiently as practicable.		
Temperature (See Note 2)	Shall not exceed 1.5 X 10 <sup>9</sup> kcals/day		No limit established		
* Based on an average dry weather design flow to the CBWTP of 100 mgd.					
** For Outfall 001 only, the limit for Total Residual Chlorine is based on monitoring defined in Schedule B. A daily maximum excursion beyond 1.0 mg/L requires the permittee to provide written documentation of the excursion with the monthly discharge monitoring report. The written documentation will provide a detailed explanation for the excursion. Discharge through Outfall 003 must meet the effluent chlorine limit of 0.2 mg/L.					

#### Notes:

1. From May 1 to October 31, these concentration limits are less stringent than the minimum design criteria found in OAR 340-041. Upgrading to the more stringent requirements will be deferred until it is necessary to expand or otherwise modify or replace the existing treatment facilities.
2. The thermal load limit was calculated using the average dry weather design flow and an estimated maximum weekly effluent temperature. This permit may be re-opened, and the maximum allowable thermal load modified, when more accurate effluent temperature data becomes available. In addition, upon approval of a Total Maximum Daily Load for temperature for this sub-basin, this permit may be re-opened and new temperature and/or thermal load limits assigned.

**Columbia Boulevard Wet Weather Treatment Facility [CBWWTF] – Wet Weather Primary Facility**

Parameters	Limitations
BOD5 and TSS: Annual Average Percent Removal Efficiency	Shall not be less than 50 percent annual average for BOD5* Shall not be less than 70 percent annual average for TSS*
pH	Shall be within the range of 6.0 - 9.0 s.u.
Total Residual Chlorine	Shall not exceed 0.2 mg/L**
Escherichia coli ( <i>E. coli</i> )	Monthly log mean of 126 organisms per 100 ml and no single sample shall exceed 406 organisms per 100 ml. If a single sample exceeds 406 organisms per 100 ml, additional sampling per Schedule B is mandated.
Temperature	No limit established
<p>* The percent removal requirement shall not apply in months when the CBWWTF monthly average flow is less than 1 mgd.</p> <p>** For Outfall 003 only, this limit for Total Residual Chlorine is based on continuous monitoring. A daily maximum excursion beyond 0.2 mg/L requires the permittee to provide written documentation of the excursion with the monthly discharge monitoring report. The written documentation will provide a detailed explanation for the excursion.</p>	

2. This permit establishes the following mixing zones within which the violation of the water quality standards from OAR 340-041 is not prohibited:

For Outfall 001, the mixing zone includes that portion of the Columbia River within 375 feet of the diffuser. The Zone of Initial Dilution (ZID) includes that portion of the Columbia River within 38 feet of the diffuser.

For Outfall 003, the mixing zone includes that portion of the Columbia River within 385 feet of the diffuser. The Zone of Initial Dilution (ZID) includes that portion of the Columbia River within 39 feet of the diffuser.

This permit contains either technology or water quality based effluent limits for those parameters discharged by the permittee that the Department has determined require effluent limitations to comply with the water quality standards found in OAR 340-041 outside the above mixing zones. The limits were established on the basis of the information provided by the permittee and following the Department's rules, including OAR 340-041-0004.

Other parameters also were identified in the permittee's application for which the Department did not establish effluent limitations. The Department has determined that those parameters do not present a reasonable potential to violate applicable water quality standards. The permittee is required to notify the Department if changes occur in its processes or influent stream, which could significantly change the effluent stream for any of those parameters.

3. Outfalls 004 through 039 (CSOs to the Willamette River and Columbia Slough):

- a. No wastes may be discharged or activities conducted that cause or contribute to a violation of water quality standards in OAR 340-41 applicable to the Lower Willamette Basin, except as provided for in OAR 340-45-080 and the mixing zones established in 3.c.(D).
- b. Ongoing operation and maintenance activities for the combined sewer system:

The following requirements are in fulfillment of the Nine Minimum Controls (NMC) for the operation and maintenance of combined sewer systems, as set forth in EPA's Combined Sewer Overflow Policy, as applicable to the Permittee. The Permittee will submit an updated NMC Implementation Report during the 5-year permit cycle to document the on-going implementation of the Nine Minimum Controls.

(1) PROPER OPERATION AND REGULAR MAINTENANCE

- (A) The collection system operation and maintenance shall be supervised by a person holding a current Class IV certificate for Collection System Operation, per Schedule D, Condition 6.
- (B) The Permittee shall continue to implement an adequate operation and maintenance program for the entire sewer system. To guide that continuing work, the City shall develop and submit to DEQ for review a draft CMOM Program Report within 24 months after this permit is issued. This CMOM Program shall be consistent with EPA's "Guide for Evaluating Capacity, Management, Operation, and Maintenance ("CMOM") Programs at Sanitary Sewer Collection Systems," EPA 305-B-05-002 (January 2005). As recommended in EPA's CMOM guidance, the City's CMOM Program Report will include documents covering:
  - i. Spill Response Tracking & Reporting Procedures
  - ii. Grease Management & Control Program
  - iii. Pump Station Reliability ProgramThe City will implement its CMOM program in accordance with the improved plan. No later than six months after completion of the final CMOM Plan, the City will finalize and submit a schedule for implementation of the actions required by the Plan.
- (C) Permittee shall retain maintenance records on all major electrical and mechanical components of the system, and pumping stations. Such records shall clearly specify the frequency and type of maintenance recommended by the manufacturer and shall show the frequency and type of maintenance performed. These maintenance records shall be available for inspection by the Department.
- (D) Permittee shall develop a Collection System Inspection and Cleaning Plan for the combined and sanitary system pipes and manholes. The Plan shall be submitted to DEQ for review and approval within 18 months of permit issuance.
- (E) Permittee shall develop a Collection System Assessment & Rehabilitation Plan for the combined and sanitary system. The Plan shall be submitted to DEQ for review and approval within 18 months of permit issuance.

(2) MAXIMUM USE OF COLLECTION SYSTEM FOR STORAGE

- (A) All dams installed at diversion structures shall be maintained at their current heights (as of the date of permit issuance) or higher except where the overflow from the diversion is captured by a downstream facility that meets the CSO performance standards (as specified in Schedule A, Section 3.c.) for CSO control. In the case where the overflow is controlled to such a standard, the diversion dams may be set as deemed necessary by the Permittee to address conveyance needs.
- (B) Under all storm conditions, discharges to the Columbia Slough from the CSO outfalls served by the Columbia Slough Consolidation Conduit (CSCC) shall be minimized by maximum utilization of the storage capacity of the CSCC. Permittee shall keep records of the levels in CSCC and the flow pumped from the CSCC.
- (C) Under all storm conditions, discharges to the Willamette River from the CSO outfalls controlled to CSO performance standards by the West Side CSO Tunnel (West Side Tunnel) shall be minimized by maximum utilization of the storage capacity of the tunnel. Permittee shall keep records of the levels in the Westside Tunnel and the flow pumped from the West Side Tunnel.
- (D) Beginning on December 1, 2011, under all storm conditions, discharges to the Willamette River from the CSO outfalls controlled to CSO performance standards by the East Side CSO Tunnel (East Side Tunnel)

shall be minimized by maximum utilization of the storage capacity of the tunnel. Permittee shall keep records of the levels in the East Side Tunnel.

- (E) During development of engineering facilities plans for the combined sewer system, Permittee shall evaluate the cost effectiveness of replacing existing pipes with larger diameter pipes to provide inline storage for reducing CSO discharges to the Willamette River.

(3) REVIEW AND MODIFICATION OF PRETREATMENT REQUIREMENTS

- (A) Permittee shall implement and maintain an approved Pretreatment Program as described in Schedule E of this permit.
- (B) If in the course of implementing the requirements of Schedule E of this Permit, the Permittee becomes aware that pollutants from industrial sources reaching receiving waters as a result of CSO discharges are causing or contributing to impairment of beneficial uses, Permittee shall modify its Pretreatment Requirements as appropriate subject to Department approval.
- (C) Permittee shall prohibit all dischargers who request Permittee's approval prior to a non-permit, periodic or one-time batch discharge from discharging during rain events for locations upstream of diversions that overflow to outfalls not yet controlled to meet the CSO performance standards. Exceptions shall be made only if extenuating circumstances can be demonstrated to show that it is unreasonable to apply this restriction. For these purposes, the definition of a rain event (opposite of a dry weather period) is when measurable rainfall occurs in the area of the industrial discharger. The rain event is considered to be over when there has been no rain in the area for a consecutive 8 hours.

(4) MAXIMIZATION OF FLOW TO THE POTW FOR TREATMENT

The permittee shall maximize flow to the CBWTP as follows:

- (A) Upon DEQ review and approval of the Columbia Boulevard Wet Weather Operations Manual (as submitted per Schedule D, Condition 4), operate CBWTP and the CBWWTF as per the manual to maximize the amount of captured CSO given secondary treatment. The manual will ensure that the CBWTP secondary facilities are maximized to an instantaneous flow rate of 100 MGD during wet weather conditions before the captured CSO is directed into the CBWWTF. The manual will also ensure the storage capacity of the CBWWTF is fully utilized to capture and direct the maximum feasible flow to the CBWTP secondary system when treatment capacity is available.
- (B) Operate major collection system pump stations and the CSO facilities to maximize flow rate and total volume of CSO delivered to the CBWTP site according to Systems Operating Plan (latest version). The Systems Operating Plan will ensure the CSCC and Westside Tunnel (and after December 2011, the East Side Tunnel) storage capacities are utilized to maximize the amount of flow delivered to the CBWTP and CBWWTF within the treatment capacities of the two treatment facilities.
- (C) Maximize underflow to the interceptors at diversion structures.
- (D) Direct all CBWTP recycle streams to the CBWTP;
- (E) Exclude all septage and trucked solids from the CBWWTF;
- (F) Retain records to document these actions. If a CSO discharge occurs, analyze the event rainfall, flow, and system performance as part of the report submitted to the Department in Schedule B.1.i. and Note 18.

(5) PROHIBITION OF CSOs DURING DRY WEATHER

- (A) No CSO discharges shall occur during dry weather. Dry weather is defined as a time when it is not raining and has not rained (in the area contributory to the combined sewer outfall where the discharge occurred) for the previous eight hours. However, discharges resulting from snow or ice melting, even though there has been no precipitation for the previous eight hours or longer, shall not be considered dry weather discharges.
- (B) Each diversion structure that can discharge directly to the Willamette River and does not have an overflow monitor shall be inspected on a weekly basis. Any observed defect in these diversion structures that could result in increased discharges to surface waters shall be repaired within 14 working days. Inspection and repair records shall be maintained for Department review.
- (C) Each diversion structure inspection required by item (5)(B) above shall take note of any accumulation of grease, grit, debris or other material which left unattended could result in an overflow. Such conditions shall be promptly corrected.
- (D) When the Permittee becomes aware that a dry weather overflow is occurring, the Permittee will take immediate corrective action to stop the overflow and initiate appropriate Public Notification procedures.
- (E) Permittee shall continue active coordination with the City of Portland Water Bureau, Parks Bureau and Fire Bureau to assure that non-emergency batch discharges by these agencies to the combined sewer system upstream of uncontrolled CSO outfalls do not result in dry weather overflows.

(6) CONTROL OF SOLID AND FLOATABLE MATERIALS IN CSOs

- (A) Permittee shall implement practicable measures to limit the quantity of solid and floatable materials in CSO discharges. Such measures shall include street sweeping, sewer cleaning, and catch basin cleaning. This requirement remains in effect until the all CSO outfalls have been demonstrated to comply with the CSO Performance Criteria (see Section c.B below — demonstration of compliance currently expected by December 2012).
- (B) Permittee shall install floatable control devices on diversion structures or outfalls where the outfall has been controlled in accordance with the CSO performance standards and is expected to overflow during storms smaller than a 5-year winter or a 10-year summer storm. (The Westside CSO Tunnel has been designed such that it captures and retains floatable debris. Therefore, no additional floatables control devices are necessary for those outfalls directly connected to the Westside Tunnel.)

(7) POLLUTION PREVENTION PROGRAMS TO REDUCE CONTAMINANTS IN CSOs

Permittee shall maintain a pollution prevention program that includes outreach and educational activities intended to reduce the contribution of pollutants entering the combined sewer system. Permittee shall submit a written description of this program consistent with the 2003 NMC Update within 60 days of the effective date of this permit.

(8) PUBLIC NOTIFICATION

Permittee shall maintain and implement a public notification and education process to inform citizens of where and when untreated discharges, including CSO and Sewer System Overflows (SSO), occur. Permittee shall submit a written description of the program consistent with the 2003 NMC Update within 60 days of the effective date of this permit.

(9) MONITORING TO CHARACTERIZE CSO IMPACTS AND EFFICACY OF CSO CONTROLS

- (A) Permittee shall monitor discharges from CSO discharge points controlled to meet CSO performance standards in accordance with Schedule B item 1.i. of this Permit.
- (B) Permittee shall continue to monitor the flow characteristics of the sewer system sufficient to support modeling for: design of future control facilities; determinations on optimum operation of the sewer system; and estimation of system discharge reductions as a result of the provision of inflow control measures and structural changes implemented for CSO control.
- (C) Permittee shall continue to monitor CSO discharges from diversion structures where level monitors are currently installed.
- (D) Permittee shall continue to perform routine monthly receiving stream water quality sampling sufficient to support analysis of the efficacy of installed and planned CSO control facilities, compliance with Water Quality Standards and compliance with TMDL allocations, as may be applicable. Receiving stream sampling shall be conducted as described in the *CSO Monitoring and Sampling Supplement* provided November 8, 2005, as part of the revised permit renewal application. Permittee shall continue its instream sampling program for 5 years after controlling all CSO outfalls to the required performance standard.

c. Performance Standards for CSOs

In accordance with the provisions of OAR 340-041-0009 (6) and (7), the approved Bacteria Control Management Plan (BCMP) for the Permittee's combined sewer system consists of ASFO WQ-NWR-91-75 and the Combined Sewer Overflow Management Plan (City of Portland, December 1994). The following frequency performance standards are derived from the BCMP:

- (1) Capture all Columbia Slough CSO discharges for treatment, or storage and subsequent treatment from November 1 through April 30, except during storms greater than or equal to a storm with a five year return frequency, and all CSO discharges to the Columbia Slough from May 1 through October 31, except during storms greater than or equal to a storm with a ten year return frequency.
- (2) For the following CSO outfalls to the Willamette River, capture all CSO discharges for treatment, or storage and subsequent treatment, from November 1 through April 30, except during storms greater than or equal to a storm with a four-in-one-year return frequency, and all CSO discharges from May 1 through October 31, except during storms greater than or equal to a storm with a three-year return frequency.

<u>CSO Outfall Name</u>	<u>Permit / City CSO Outfall Number</u>
SW Carolina Street	005 / 3
SW Sheridan Street	006 / 7B
Ankeny Pump Station	007 / 9
NW Nicolai Street	008 / 15
NW 110 <sup>th</sup> Avenue	010 / 24
Garthwick (Waverly)	012 / 26A
Riverside (Swan Island)	028 / 47
N Reno Avenue	030 / 53



- (3) Beginning on December 1, 2011, for the following CSO outfalls to the Willamette River, capture all CSO discharges for treatment, or storage and subsequent treatment, from November 1 through April 30, except during storms greater than or equal to a storm with a four-in-one-year return frequency, and all CSO discharges from May 1 through October 31, except during storms greater than or equal to a storm with a three-year return frequency.

<b>CSO Outfall Name</b>	<b>Permit / City CSO Outfall Number</b>
SW California Street	004 / 1
NW 29 <sup>th</sup> Ave./Balch Gulch	009 / 17
SE Clatsop Street	011 / 26
SE Umatilla Street	013 / 27
SE Insley Street	014 / 28
SE Taggart Street	015 / 30
SE Division Place	016 / 31
SE Clay Street	017 / 33
SE Hawthorne Boulevard	018 / 34
SE Yamhill Street	019 / 35
SE Alder Street	020 / 36
SE Stark Street	021 / 37
SE Oak Street	022 / 38
NE Glisan Street	023 / 40
NE Holladay Street	024 / 41
N Wheeler Place	025 / 43
N Randolph Avenue	026 / 44A
N Beech Street	027 / 46
N Alta Avenue	029 / 52

- (4) Captured CSOs shall be directed to CBWTP and CBWWTF and shall receive a minimum of solids and floatables removal, primary clarification and disinfection.
- (5) Mixing zones are established for Outfalls #006 (SW Sheridan Street), #007 (Ankeny Pump Station), #008 (NW Nicolai Street) and #028 (Riverside). These mixing zones provide 10:1 dilution for all CSO Pollutants of concern (E. coli, total lead and total copper) and will be active only during the infrequent and short periods when CSO discharges are caused by storms that exceed the performance standard in 3.c.(B). The mixing zones shall be limited in size according to the chart below.

<b>Outfall</b>	<b>Maximum Downstream Extent of Proposed Mixing Zone (meters)</b>	<b>Maximum Cross-River Extent of Proposed Mixing Zone (meters)</b>
SW Sheridan Street #006	73	34
Ankeny Pump Station #007	99	36
NW Nicolai Street #008	138	36
Riverside (Swan Island) #028	84	14

A similar table of mixing zones providing 10:1 dilution will be submitted to DEQ for review and approval for the East Side outfalls that will potentially discharge CSO on average 4 times per year during winter or during the 3-year summer storm. The updated mixing zone table will be submitted prior to December 1, 2011.

- (6) CSO discharges from a CSO discharge point that occur after that discharge point has been controlled in accordance with the schedule established in the approved BCMP shall be deemed to have received the highest and best practicable treatment and to be in conformance with the Statewide Narrative Criteria set forth in OAR 340-041-0007 if the following conditions are met:
- (A) The discharge is consistent with the discharge frequency performance standard set forth in 3.c. (1), (2) and (3) above, as applicable.
  - (B) The discharge point has been equipped with floatable control devices if required by 3.b.(6)(B) above.
  - (C) The Permittee continues to perform and implement the NMCs as required by 3.b. above.
- (7) Post-Construction CSO Monitoring  
To confirm that the remaining CSO discharges protect beneficial uses and provide for attainment of the Willamette River water quality standards, the permittee shall implement the following program:
- (A) During CSO discharge events in which the duration of overflow is sufficient to mobilize a sampling crew (minimum 4 hours), permittee will obtain grab samples from one of the representative overflow points discharging from the Willamette CSO Tunnel system.
  - (B) Grab samples will be obtained and analyzed in a similar manner to the CBWTP and CBWWTF outfalls 001 and 003 as described in Schedule B.
  - (C) Grab samples will be analyzed for the CSO Pollutants of concern: E-coli, Total Lead and Total Copper. E-coli sampling and analysis will follow the procedures in Schedule B, Note 1, using exceedance values that account for the 10:1 dilution obtained in the mixing zones.
  - (D) CSO discharges are protective of beneficial uses and do not preclude attainment of water quality standards when the monitoring results do not exceed the appropriate numeric standards for the Pollutants of Concern while accounting for the 10:1 dilution obtained in the mixing zones.

Permittee shall sample and analyze CSO discharges from five (5) events during the permit cycle unless it is documented that the number of events or the duration of the events were not sufficient to allow this monitoring program to be carried out.

4. Outfalls 002.0, 002.1, 002.2(Emergency Relief Outfalls) and 040-060(Sewer System Overflows)

Discharge is prohibited.

5. Outfall 099 (Recycled Water):

- a. No discharge to state waters is permitted. When used for irrigation, all recycled water shall be distributed on land, for dissipation by evapotranspiration and controlled seepage by following sound irrigation practices so as to prevent:
  - (1) Prolonged ponding of treated recycled water on any ground surface;
  - (2) Surface runoff or subsurface drainage through drainage tile;
  - (3) The creation of odors, favorable conditions for fly and mosquito breeding or other nuisances;
  - (4) The overloading of land with nutrients, organics or other pollutant parameters; and

- (5) Impairment of existing or potential beneficial uses of groundwater.
- b. Prior to any use of recycled water, it shall receive at least Class D treatment as defined in OAR 340-055, and meet the following limitation:
  - E. coli* /100 ml shall not exceed a 30 day log mean of 126 organisms per 100 milliliters and 406 organisms per 100 milliliters in any single sample.
- 6. No activities shall be conducted that could cause an adverse impact on existing or potential beneficial uses of groundwater. All wastewater and process related residuals shall be managed and disposed in a manner that will prevent a violation of the Groundwater Quality Protection Rules (OAR 340-040).

## SCHEDULE B

### 1. Minimum Monitoring and Reporting Requirements.

The permittee shall monitor the parameters as specified below at the locations indicated. The laboratory used by the permittee to analyze samples shall have a quality assurance/quality control (QA/QC) program to verify the accuracy of sample analysis. If QA/QC requirements are not met for any analysis, the results shall be included in the report, but not used in calculations required by this permit. When possible, the permittee shall re-sample in a timely manner for parameters failing the QA/QC requirements, analyze the samples, and report the results.

#### a. Influent

The facility influent sampling locations are the following:

Measurements are taken just after the influent structure and just before headworks/screening facilities. Influent grab samples and composite samples for BOD, TSS and toxics are taken in the headworks, following the bar screens.

Item or Parameter	Minimum Frequency	Type of Sample
Total Flow (MGD)	Daily	Measurement
Maximum Daily Flow Rate (MGD)	Daily	Measurement
Flow Meter Calibration	Quarterly	Verification
Biochemical Oxygen Demand (BOD <sub>5</sub> )	Daily	24-hr Composite
Total Suspended Solids (TSS)	Daily	24-hr Composite
pH	Daily	Grab

#### b. CBWTP and/or CBWWTF Treated Effluent from Outfall 001 and/or 003, as applicable.

The facility effluent sampling locations are the following:

Effluent grab samples, measurements and composite samples are taken from discharge lines. The composite sampler is to be located at a point following clarification to assure representative sampling for the discharge. Bacteria, total residual chlorine and bioassay samples shall be taken after dechlorination mix box and just before the outfalls.

Item or Parameter	Minimum Frequency	Type of Sample
Total Flow (MGD)	Daily	Measurement
Flow Meter Calibration	Quarterly	Verification
pH	Daily	Grab
Biochemical Oxygen Demand (BOD <sub>5</sub> )	Daily	24-hr Composite*
Total Suspended Solids (TSS)	Daily	24-hr Composite*
Pounds Discharged (BOD <sub>5</sub> and TSS)	Daily	Calculation
Average Percent Removed (BOD <sub>5</sub> and TSS)	Monthly	Calculation
<i>E. coli</i>	Daily	Grab (See Note 1)
Quantity Chlorine Used	Daily	Measurement
Total Residual Chlorine	Daily	Continuous**
Bioassay (See Note 2)	Annually	Acute & chronic
<b>Nutrients:</b>		
NH <sub>3</sub> -N, NO <sub>2</sub> +NO <sub>3</sub> -N, TKN and Total Phosphate-P	Weekly (May – October)	24-hr Composite*

\*CBWWTF composite samples are dependent on the day's wet weather diversion and may be less than 24 hours.

\*\*Continuous monitoring results shall be evaluated on an average hourly basis for compliance determination.

c. Pretreatment Program (See Note 3)

Item or Parameter	Minimum Frequency	Type of Sample
Metals (Ag, As, Cd, Cr, Cu, Hg, Mo, Ni, Pb, Se, Zn) and Cyanide (CN) (See Note 4): Influent Effluent Biosolids	Weekly Monthly Monthly	24-hr Composite 24-hr Composite Representative of the Primary Digested Biosolids (See Note 5)
Priority Pollutant Organics (See Note 6): Influent Effluent Biosolids	Quarterly Quarterly Quarterly	24-hr Composite 24-hr Composite Grab
Toxics Removal Rate: Metals, Cyanide and Priority Pollutant Organics	Annually	Calculation (See Note 7)

d. Biosolids Management

Item or Parameter	Minimum Frequency	Type of Sample
Biosolids analysis including: Total Solids (% dry wt.) Volatile solids (% dry wt.) Biosolids nitrogen for: NH <sub>3</sub> -N; NO <sub>3</sub> -N; & TKN (% dry wt.) Phosphorus (% dry wt.) Potassium (% dry wt.) pH (standard units) Biosolids trace inorganics for: As, Cd, Cu, Hg, Mo, Ni, Pb, Se & Zn, measured as total in mg/kg	Monthly	Composite sample to be representative of the product to be land applied (See Note 5)
Record of locations where biosolids are applied on each DEQ approved site. (Site location maps to be maintained at treatment facility for review upon request by DEQ)	Each occurrence	Date, volume & locations where biosolids were applied recorded on site location map.
Record of % volatile solids reduction accomplished through stabilization	Monthly	Calculation (See Note 8)

e. Emergency Relief Outfalls 002.0, 002.1 & 002.2

Item or Parameter	Minimum Frequency	Type of Sample
Flow	Daily (during each occurrence)	Estimate duration and volume

f. Temperature Monitoring (Monitored only during May 1 - October 31)

Item or Parameter	Minimum Frequency	Type of Sample
Effluent Temperature, Daily Max (See Note 9)	Daily	Continuous
Effluent Temperature, Average of Daily Maximums (See Note 9)	Weekly	Calculation
Thermal Load (See Note 9)	Weekly	Calculation (See Note 10)
Stream Temperature, Max Daily, Upstream And Downstream (see note 11)	Daily	Continuous
Stream Temperature, Average of Daily Maximums, Upstream And Downstream (see note 11)	Weekly	Calculation
Audit Continuous Temperature Monitors (See note 12)	June and September	Record
Check Temperature Monitors (See note 13)	Monthly	Visual Observation and Record

g. Groundwater Monitoring (See Note 14)

Parameter	Minimum Frequency	Type of Sample
Water Level	Quarterly (Feb, May , Aug & Nov)	Measurement
TDS	Quarterly (Feb, May , Aug & Nov)	Grab
Orthophosphorous	Quarterly (Feb, May , Aug & Nov)	Grab
Chloride	Quarterly (Feb, May , Aug & Nov)	Grab
NO <sub>2</sub> +NO <sub>3</sub> -N	Quarterly (Feb, May , Aug & Nov)	Grab
Sulfate	Quarterly (Feb, May , Aug & Nov)	Grab
Metals(Ag,As,Cd,Cr,Cu,Hg,Ni, Pb, Zn)	Annually (in August)	Grab
Priority Pollutant Organics	Annually (in August)	Grab

h. Recycled Water (Off treatment plant site)

Item or Parameter	Minimum Frequency	Type of Sample
Total Flow (MGD)	Daily	Estimate (See Note 15)
pH	Daily	Grab
<i>E. coli</i>	Weekly	Grab

i. CSO Control System

Item or Parameter	Minimum Frequency	Type of Sample
Influent Pump Station Total Flow (MGD)	Daily	Reading
Pump Station Wet Well Elevation	Daily	Maximum reading
Designated Overflow Points (See Note 16)		
CSO Time, Duration and Volume	Each occurrence	Reading (See Note 17)
Event Analysis	Each occurrence	Report (See Note 18)
<i>E. coli</i>	Annual	Grab (See Note 1)

2. **Reporting Procedures**

- a. Monitoring results shall be reported on approved forms. The reporting period is the calendar month. Reports must be submitted to the Department's Northwest Region - Portland office by the 15th day of the following month.
- b. State monitoring reports shall identify the name, certificate classification and grade level of each principal operator designated by the permittee as responsible for supervising the wastewater collection and treatment systems during the reporting period. Monitoring reports shall also identify each system classification as found on page two of this permit.
- c. Monitoring reports shall also include a record of the quantity and method of use of all sludge removed from the treatment facility and a record of all applicable equipment breakdowns and bypassing.

3. **Report Submittals**

- a. Within 6 months of the expiration date of this permit, Permittee shall submit to the Department a report updating the activities performed during the past 5 years in implementing the Nine Minimum Controls.
- b. An annual report covering temperature monitoring done in the calendar year is due by February 15<sup>th</sup> of the following year. The report is to include the weekly temperatures for effluent, upstream and downstream monitoring sites (average of daily maximum temperatures in each week).
- c. For any year in which biosolids are land applied, a report shall be submitted to the Department by February 19 of the following year that describes solids handling activities for the previous year and includes, but is not limited to, the required information outlined in OAR 340-050-0035(6)(a)-(e).

**NOTES:**

1. *E. coli* monitoring must be conducted according to any of the following test procedures as specified in **Standard Methods for the Examination of Water and Wastewater, 19th Edition**, or according to any test procedure that has been authorized and approved in writing by the Director or his authorized representative:

Method	Reference	Page	Method Number
mTEC agar, MF	Standard Methods, 18th Edition	9-29	9213 D
NA-MUG, MF	Standard Methods, 19th Edition	9-63	9222 G
Chromogenic Substrate, MPN	Standard Methods, 19th Edition	9-65	9223 B
Colilert QT	Idexx Laboratories, Inc.		

If a single bacteria sample exceeds 406 organisms per 100 ml, then five consecutive re-samples shall be taken at four hour intervals beginning as soon as practicable (preferably within 28 hours) after the original sample was taken. If the log mean (geometric average) of the five re-samples is less than or equal to 126 organisms per 100 ml, a violation shall not be triggered.

Due to the intermittent discharge of wet weather flow from Outfall 003 at this facility, *E. coli* daily grab samples shall be done in conjunction with sampling from Outfall 001 whenever flow is observed present in Outfall 003.

CSO discharge *E. coli* sampling will occur at least once per year following the above sample protocol.

2. Though only a single bioassay test is required each year for the CBWTP, the permittee should adjust the timing of the bioassay tests so that the permittee will have bioassay results that will represent the treatment facility discharge under both winter (high flow) and summer (low flow) conditions. In addition an annual bioassay test for the CBWWTF shall occur.

3. Daily 24-hour composite samples shall be analyzed and reported separately. Toxic monitoring results and toxics removal efficiency calculations shall be tabulated and submitted with the Pretreatment Program Annual Report as required in Schedule E. Submittal of toxic monitoring results with the monthly Discharge Monitoring Report is not required. Effluent sampling from the CBWWTF shall be initiated within one hour of the start of the discharge. The initial CBWWTF sample shall be a grab sample of sufficient size to conduct all necessary analyses. Additional aliquots shall be taken at least every hour until the end of the calendar day or the facility ceases discharge, whichever occurs first. All aliquots taken during on 24-hour period of discharge shall be combined into one composite sample on a flow-weighted basis. Monitoring for all parameters shall be conducted on the initial grab sample unless there is adequate volume of composite sample to conduct the analyses.
4. For influent and effluent cyanide samples, at least six (6) discrete grab samples shall be collected over the operating day. Each aliquot shall not be less than 100 mL and shall be collected and composited into a larger container which has been preserved with sodium hydroxide for cyanide samples to insure sample integrity.
5. Composite samples from the dewatered biosolids shall be taken from representative areas in the dewatered biosolids pursuant to **Test Methods for Evaluating Solid Waste, Volume 2; Field Manual, Physical/Chemical Methods, November 1986, Third Edition, Chapter 9.**

Inorganic pollutant monitoring must be conducted according to **Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, Second Edition (1982)** with Updates I and II and **Third Edition (1986)** with Revision I.

6. The permittee shall perform chemical analysis of its influent, effluent and biosolids to be beneficially used for the specific toxic pollutants listed in Tables II and III of Appendix D of 40 CFR Part 122 in accordance with the sampling frequency in Schedule B. The influent and effluent samples shall be 24-hour daily composites, except where sampling volatile compounds. In this case, six (6) discrete samples (not less than 100 mL) collected over the operating day are acceptable. The permittee shall take special precautions in compositing the individual grab samples for the volatile organics to insure sample integrity (i.e. no exposure to the outside air). Alternately, the discrete samples collected for volatiles may be analyzed separately and averaged. For biosolids analyses, a composite of weekly grab samples for the final product shall be used.

In addition to analyzing for pollutants specified in the above paragraph, the permittee shall make a reasonable attempt using GC/MS analytical techniques to identify and quantify the ten most abundant constituents of each effluent extract (excluding priority pollutants and unsubstituted aliphatic compounds) shown to be present by peaks on the total ion plots (reconstructed gas chromatograms) having more than ten times greater than the standard deviation of the area of the adjacent background noise. Identification shall be attempted through the use of the USEPA/NIH computerized library of mass spectra, with visual confirmation by an experienced analyst. Quantification may be an order-of-magnitude estimate based upon comparison with an internal standard. It must be recognized this is a screening tool and not intended to be rigorous.

The results of the Priority Pollutant Scan analysis shall be submitted with the annual pretreatment report.

7. Plant removal rates shall be calculated by: (1) averaging the monthly influent load values for each parameter collected during the sampling event; (2) averaging the monthly effluent load values for each parameter collected during the sampling event; and (3) using the two average loads to calculate the parameter's removal. Where influent and effluent monitoring data are below the analytical detection level, the permittee may report removals as "N/A" (not applicable). The monthly removals as well as monitoring data for each day of sampling shall be reported with the Pretreatment Program Annual Report.
8. Calculation of the percent volatile solids reduction is to be based on a comparison of representative grab samples of raw primary and secondary solids entering anaerobic digesters with anaerobically digested primary



and secondary solids. The determination of the volatile solids reduction of belt pressed solids that are land applied may also reflect additional solids stabilization which has occurred in the Triangle Lake facultative storage lagoon.

9. After two full years of temperature monitoring, and if approved in writing by the Department, monitoring may be waived for those months when the effluent temperature does not exceed the 20°C stream temperature standard (Oregon Administrative Rules, Chapter 340-041).
10. Calculated as follows:  
(Weekly average of daily maximum effluent temperatures in °C - applicable summer stream temperature standard, 20°C) X (Weekly average of daily flow in MGD) X 3.785 = Thermal load, in million kcal/day.
11. If grab samples are used, monitoring results are to be reported with each month's DMR. If continuous monitors are used, record the time between temperature readings, and results are to be tabulated and submitted in an annual report. Monitoring is to begin no later than one year after permit issuance. After two full years of temperature monitoring, if approved in writing by the Department, monitoring may be waived for those months when the effluent does not exceed the 20°C stream temperature standard. The sites shall be located following the DEQ Procedural Guidance for Water Temperature Monitoring, and shall be located just upstream from the point of discharge, and at the edge of the mixing zone along the centerline of the plume. The permittee shall keep a map clearly showing the proposed monitoring points, a description of the stream conditions (e.g. pools or riffle) and the latitude and longitude of the sites, and have this information available for DEQ inspection upon request at the facility site.
12. If continuous temperature monitors are used either for the instream or effluent monitoring, the devices must be audited in June and September, following procedures described in DEQ Procedural Guidance for Water Temperature Monitoring.
13. If continuous temperature monitors are used, the monitors are to be checked visually monthly to insure that the devices are still in place and submerged.
14. Triangle Lake groundwater monitoring shall be conducted in accordance with the groundwater monitoring plan for the site. Groundwater level data shall be presented both in tabular form and on a site map showing monitoring well locations and identification.
15. Flow monitoring of effluent reuse sent off the treatment plant site shall be based on pump time or flow meter, whichever is most practicable.
16. The designated overflow points are those locations within the CSO control system where CSO will occur after the CSO performance standard (Schedule A, Section 3.c.) has been reached.
17. Notification required within 24 hours to Department's NWR office and an annual summary of all dry weather overflow events shall be made.
18. Within 5 days after a storm-related discharge from a controlled CSO outfalls, Permittee shall submit an analysis of rainfall, storage levels, and pumping rates for the CSO system that documents: (a) the volume, time, duration, and peak overflow rates from each outfall where overflow occurred; (b) how the storm event compares to the approved design storm for the applicable CSO performance standard, (c) operational issues and performance of the CSO facilities designed to control and convey CSO to CBWTP for treatment; and (d) the performance of outfalls where floatable control devices are not installed due to expected high levels of CSO control (low frequency of CSO discharges). Extensions to the 5-day reporting period can be requested under circumstances when the data collection and analysis requires additional time to complete.

## **SCHEDULE D**

### **Special Conditions**

1. At least ninety (90) days (unless otherwise agreed to by the Department) prior to releasing final effluent for reuse off the treatment plant site, the permittee shall submit to the Department for approval a Recycled Water Use Plan. This management plan shall be in accordance with Oregon Administrative Rules, Chapter 340, Division 55, "Recycled Water Use". Upon approval of the plan by the Department, the plan shall be implemented by the permittee. No substantial changes shall be made in the approved plan without written approval of the Department.
2.
  - a. Within 90 days of permit issuance the permittee shall submit to the Department for approval a field study plan to validate the modeled dispersion, mixing and dilution characteristics of the discharge from Outfall 001 under critical flow conditions.
  - b. Within one year of Department approval of the study plan, the permittee shall complete the study.
  - c. Upon completion of the study, if the Department determines that the mixing zone evaluation indicates water quality standards violations, the permittee will be required to submit a plan and schedule for upgrading or modifying treatment to achieve compliance with water quality standards.
3. Within one year of permit issuance, the permittee shall provide a summary review of the status and condition of all permittee controlled pump stations. The information provided shall at minimum, identify the location of designed overflow points, define the alarm system at the pump stations, and note which pump stations are required to operate under the five year design storm with all available pumps in service. In addition as part of this summary, the permittee shall evaluate compliance with OAR 340-041-0009(6).
4. Within 180 days of permit issuance, the permittee shall provide to the Department a Wet Weather Operations Manual the details the operational steps necessary to optimize the use of the secondary treatment process during wet weather flow events at the treatment facilities.
5. The permittee shall submit a complete proposal of mandatory and voluntary streamlining program modifications to the Department for approval within one year from the date of re-issuance of this NPDES permit. This includes proposed changes to the City of Portland's pretreatment-related municipal ordinance and operating procedures to reflect the revisions to 40 CFR §403 that became effective November 14, 2005, and to attain consistency with Schedule E of this permit. The Department may extend the submission date if requested by the permittee. These proposed modifications will be considered non-substantial pretreatment program modifications under 40 CFR 403.18 unless otherwise determined by the Department to be significant.
6. Within two years of permit issuance the permittee shall submit to the Department plans and a schedule for completion of the Triangle Lake lining and monofill project.
7. The permittee is expected to meet the compliance dates which have been established above in this schedule. Either prior to or no later than 14 days following any lapsed compliance date, the permittee shall submit to the Department a notice of compliance or noncompliance with the established schedule. The Director may revise a schedule of compliance if he determines good and valid cause resulting from events over which the permittee has little or no control.
8. All biosolids shall be managed in accordance with the current, DEQ approved biosolids management plan, and the site authorization letters issued by the DEQ. Any changes in solids management activities that significantly differ from operations specified under the approved plan require the prior written approval of the DEQ.

All new biosolids application sites shall meet the site selection criteria set forth in OAR 340-050-0070 and must be located within Yamhill, Marion, Polk, Wasco, Umatilla, Morrow and Sherman Counties.

All currently approved sites are located in Umatilla, Morrow and Sherman County. Other sites authorized during the life of this permit shall meet criteria identified in the CBWTP's DEQ approved land application plan. No new public notice is required for the continued use of these currently approved sites. Property owners adjacent to any newly approved application sites shall be notified, in writing or by any method approved by DEQ, of the proposed activity prior to the start of application. For proposed new application sites that are deemed by the DEQ to be sensitive with respect to residential housing, runoff potential or threat to groundwater, an opportunity for public comment shall be provided in accordance with OAR 340-050-0030.

9. This permit may be modified to incorporate any applicable standard for biosolids use or disposal promulgated under section 405(d) of the Clean Water Act, if the standard for biosolids use or disposal is more stringent than any requirements for biosolids use or disposal in the permit, or controls a pollutant or practice not limited in this permit.

10. **Whole Effluent Toxicity Testing**

- a. The permittee shall conduct whole effluent toxicity tests as specified in Schedule B of this permit.
- b. Bioassay tests may be dual end-point tests, only for the fish tests, in which both acute and chronic end-points can be determined from the results of a single chronic test (the acute end-point shall be based upon a 48-hour time period).
- c. Acute Toxicity Testing - Organisms and Protocols
  - (1) The permittee shall conduct 48-hour static renewal tests with the *Ceriodaphnia dubia* (water flea) and the *Pimephales promelas* (fathead minnow).
  - (2) The presence of acute toxicity will be determined as specified in **Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms**, Fourth Edition, EPA/600/4-90/027F, August 1993.
  - (3) An acute bioassay test shall be considered to show toxicity if there is a statistically significant difference in survival between the control and 100 percent effluent, unless the permit specifically provides for a Zone of Immediate Dilution (ZID) for biotoxicity. If the permit specifies such a ZID, acute toxicity shall be indicated when a statistically significant difference in survival occurs at dilutions greater than that which is found to occur at the edge of the ZID.
- d. Chronic Toxicity Testing - Organisms and Protocols
  - (1) The permittee shall conduct tests with: *Ceriodaphnia dubia* (water flea) for reproduction and survival test endpoint, *Pimephales promelas* (fathead minnow) for growth and survival test endpoint, and *Raphidocelis subcapitata* (green alga formerly known as *Selenastrum capricornutum*) for growth test endpoint.
  - (2) The presence of chronic toxicity shall be estimated as specified in **Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms**, Third Edition, EPA/600/4-91/002, July 1994.
  - (3) A chronic bioassay test shall be considered to show toxicity if a statistically significant difference in survival, growth, or reproduction occurs at dilutions greater than that which is known to occur at the edge of the mixing zone. If there is no dilution data for the edge of the

mixing zone, any chronic bioassay test that shows a statistically significant effect in 100 percent effluent as compared to the control shall be considered to show toxicity.

e. Quality Assurance

Quality assurance criteria, statistical analyses and data reporting for the bioassays shall be in accordance with the EPA documents stated in this condition and the Department's **Whole Effluent Toxicity Testing Guidance Document**, January 1993.

f. Evaluation of Causes and Exceedances

- (1) If toxicity is shown, as defined in sections c.(3) or d.(3) of this permit condition, another toxicity test using the same species and Department approved methodology shall be conducted within two weeks, unless otherwise approved by the Department. If the second test also indicates toxicity, the permittee shall follow the procedure described in section f.(2) of this permit condition.
- (2) If two consecutive bioassay test results indicate acute and/or chronic toxicity, as defined in sections c.(3) or d.(3) of this permit condition, the permittee shall evaluate the source of the toxicity and submit a plan and time schedule for demonstrating compliance with water quality standards. Upon approval by the Department, the permittee shall implement the plan until compliance has been achieved. Evaluations shall be completed and plans submitted to the Department within 6 months unless otherwise approved in writing by the Department.

g. Reporting

- (1) Along with the test results, the permittee shall include: 1. the dates of sample collection and initiation of each toxicity test; 2. the type of production; and 3. the flow rate at the time of sample collection. Effluent at the time of sampling for bioassay testing should include samples of required parameters stated under Schedule B, condition 1. of this permit.
- (2) The permittee shall make available to the Department, on request, the written standard operating procedures they, or the laboratory performing the bioassays, are using for all toxicity tests required by the Department.

h. Reopener

If bioassay testing indicates acute and/or chronic toxicity, the Department may reopen and modify this permit to include new limitations and/or conditions as determined by the Department to be appropriate, and in accordance with procedures outlined in Oregon Administrative Rules, Chapter 340, Division 45.

11. The permittee shall comply with Oregon Administrative Rules (OAR), Chapter 340, Division 49, "Regulations Pertaining To Certification of Wastewater System Operator Personnel" and accordingly:

- a. The permittee shall have its wastewater system supervised by one or more operators who are certified in a classification and grade level (equal to or greater) that corresponds with the classification (collection and/or treatment) of the system to be supervised as specified on page one of this permit.

**Note:** A "supervisor" is defined as the person exercising authority for establishing and executing the specific practice and procedures of operating the system in accordance with the policies of the permittee and requirements of the waste discharge permit. "Supervise" means responsible for the technical operation

**of a system, which may affect its performance or the quality of the effluent produced. Supervisors are not required to be on-site at all times.**

- b. The permittee's wastewater system may not be without supervision (as required by Special Condition 11.a. above) for more than thirty (30) days. During this period, and at any time that the supervisor is not available to respond on-site (i.e. vacation, sick leave or off-call), the permittee must make available another person who is certified at no less than one grade lower than the system classification.
- c. If the wastewater system has more than one daily shift, the permittee shall have the shift supervisor, if any, certified at no less than one grade lower than the system classification.
- d. The permittee is responsible for ensuring the wastewater system has a properly certified supervisor available at all times to respond on-site at the request of the permittee and to any other operator.
- e. The permittee shall notify the Department of Environmental Quality in writing within thirty (30) days of replacement or redesignation of certified operators responsible for supervising wastewater system operation. The notice shall be filed with the Water Quality Division, Operator Certification Program, 400 East Scenic Drive, Suite 307, The Dalles, OR 97058. This requirement is in addition to the reporting requirements contained under Schedule B of this permit.
- f. Upon written request, the Department may grant the permittee reasonable time, not to exceed 120 days, to obtain the services of a qualified person to supervise the wastewater system. The written request must include justification for the time needed, a schedule for recruiting and hiring, the date the system supervisor availability ceased and the name of the alternate system supervisor(s) as required by 11.b. above.

12. The Department may modify this permit as needed:

- a. To comply with any State or Federal Law or regulation that addresses CSOs that is promulgated subsequent to the effective date of this permit;
- b. When additional information indicates the discharges from the completed CSO facilities (in accordance with the schedule in the BCMP) cause, outside of an approved mixing zone, violations of State water quality standards or fail to protect designated beneficial uses;
- c. If the facilities or CSO controls are substantially modified; or
- d. For any other valid reason pursuant to 40 CFR § 122.62.

13. Management and Maintenance of Groundwater Monitoring Wells at CBWTP

- a. The permittee shall protect and maintain each groundwater monitoring well so that samples collected are representative of actual conditions.
- b. All monitoring well abandonments, replacements, repairs, and installations must be conducted in accordance with the Water Resources Department Oregon Administrative Rules, Chapter 690, Division 240, and with the Department's guidance "Groundwater Monitoring Well Drilling, Construction, and Decommissioning", dated August 22, 1992. All monitoring well abandonments, replacements, repairs, and installations must be documented in a report prepared by an Oregon registered geologist.

- c. If a monitoring well becomes damaged or inoperable, the permittee shall notify the Department in writing within 14 days of when the permittee becomes aware of the circumstances. The written report shall describe: what problem has occurred, the remedial measures that have been or will be taken to correct the problem, and the measures taken to prevent the recurrence of damage or inoperation. The Department may require the replacement of inoperable monitoring wells.
  - d. Prior to installation of new or replacement monitoring wells, the placement or design must be approved in writing by the Department. Well logs and a well completion report shall be submitted to the Department within 30 days of installation of the well. The report shall include a survey drawing showing the location of all monitoring wells, disposal sites, and water bodies.
  - e. Prior to abandonment of existing wells deemed unsuitable for groundwater monitoring, an abandonment plan must be submitted to the Department for review and approval.
14. The permittee shall perform all testing required in Part D of EPA Form 2A for Outfalls 001 and 003. The testing includes all metals (total recoverable), cyanide, phenols, hardness and the 85 pollutants included under volatile organic, acid extractable and base-neutral compounds. Three scans are required during the 4 ½ years after permit issuance. Two of the three scans must be performed no fewer than 4 months and no more than 8 months apart. The effluent samples shall be 24-hour daily composites, except where sampling volatile compounds. In this case, six (6) discrete samples (not less than 100 mL) collected over the operating day are acceptable. The permittee shall take special precautions in compositing the individual grab samples for the volatile organics to insure sample integrity (i.e. no exposure to the outside air). Alternately, the discrete samples collected for volatiles may be analyzed separately and averaged.

Additionally, receiving water testing results for priority pollutants must be completed for the next NPDES permit renewal application. If identified as pollutants of concern, at minimum, four (4) analyses for total recoverable metals, cyanide and phenols along with volatile organic compounds, acid extractable compounds, base-neutral compounds and organochlorine pesticides and PCBs. The hardness of the receiving water must also be collected for any pollutant with hardness dependent criteria. Samples should be conducted twice per year and spaced such that some are conducted during both wet and dry seasons. On a case by case basis, up to six (6) additional samples for metals, cyanide, phenols and hardness may be required. Pollutants of concern are those pollutants that are believed to be occurring in the receiving water environment upstream from the point of discharge. For example, naturally occurring metals such as mercury or arsenic, or any pollutant for which the receiving water is water quality limited as indicated through the most recent EPA approved 303(d) list.

15. The permittee shall notify the DEQ Northwest Region - Portland Office (phone: (503) 229-5263) in accordance with the response times noted in the General Conditions of this permit, of any malfunction so that corrective action can be coordinated between the permittee and the Department.

## **SCHEDULE E**

### **Pretreatment Activities**

The permittee's approved program shall apply to its entire sewer service area serviced by the Tryon Creek and Columbia Boulevard wastewater treatment plants and contributing jurisdictions. The permittee shall implement the following pretreatment activities:

1. **Program Administration**

The permittee shall conduct and enforce its Pretreatment Program, as approved by the Department, and comply with the General Pretreatment Regulations (40 CFR Part 403). The permittee shall secure and maintain sufficient resources and qualified personnel to carry out the program implementation procedures described in this permit as required by 40 CFR § 403.8(f)(3).

2. **Legal Authorities**

The permittee shall adopt all legal authority necessary to fully implement its approved pretreatment program and to comply with all applicable State and Federal pretreatment regulations. The permittee must also establish, where necessary, contracts or agreements with contributing jurisdictions to ensure compliance with pretreatment requirements by industrial users within these jurisdictions. These contracts or agreements shall identify the agency responsible for all implementation and enforcement activities to be performed in the contributing jurisdictions. Regardless of jurisdictional situation, the permittee is responsible for ensuring that all aspects of the pretreatment program are fully implemented and enforced.

3. **Industrial Waste Survey**

The permittee shall update its inventory of industrial users at a frequency and diligence adequate to ensure proper identification of industrial users subject to pretreatment standards, but no less than once per year. The permittee shall notify these industrial users of applicable pretreatment standards in accordance with 40 CFR § 403.8(f)(2)(iii).

4. **National Pretreatment Standards**

The permittee shall enforce categorical pretreatment standards promulgated pursuant to Section 307(b) and (c) of the Act, prohibited discharge standards as set forth in 40 CFR § 403.5(a) and (b), or local limitations developed by the permittee in accordance with 40 CFR § 403.5(c), whichever are more stringent, or are applicable to any non-domestic source regulated under Section 307(b), (c), or (d) of the Act.

5. **Local Limits**

The permittee shall perform a technical evaluation of the need to revise local limits within 18 months after permit re-issuance unless the Department authorizes or requires, in writing, an alternate time frame. Locally derived discharge limitations shall be defined as pretreatment standards under Section 307(d) of the Act and must conform to 40 CFR §403.5(c), §403.8(f)(4). Technically based local limits shall be developed in accordance with the procedures established by the Department, and the USEPA's Local Limits Guidance.

6. **Control Mechanisms**

The permittee shall issue an individual control mechanism to all Significant Industrial Users except where the permittee may, at its discretion, issue a general control mechanism as defined by 40 CFR §403.8(f)(1)(iii); or certification in lieu of a control mechanism for Non-Significant Categorical Industrial Users (NSCIUs) as defined by § 403.3(v)(2), and Non-Discharging Categorical Industrial Users (NDCIUs). All individual and

general control mechanisms must be enforceable and contain, at a minimum, the requirements identified in 40 CFR § 403.8(f)(1)(iii)(B); and, may contain equivalent concentration and mass based effluent limitations where appropriate under § 403.6(c)(5) and (6). Unless a more stringent definition has been adopted by the permittee, the definition of Significant Industrial User shall be as stated in 40 CFR § 403.3(v).

7. Compliance Monitoring:

Industrial User Sampling and Inspection

The permittee shall randomly sample and analyze the effluent from Industrial Users at a frequency commensurate with the character, consistency, and volume of the discharge and conduct surveillance activities in order to identify, independent of information supplied by Industrial Users, occasional and continuing noncompliance with Pretreatment Standards. The permittee shall conduct a complete facility inspection; and, sample the effluent from each Significant Industrial User at least once a year at a minimum, unless otherwise specified below:

(a) Where the permittee has authorized the Industrial User subject to a categorical Pretreatment Standard to forego sampling of a pollutant regulated by a categorical Pretreatment Standard in accordance with §403.12(e)(2), the permittee must sample for the waived pollutant(s) at least once during the term of the Categorical Industrial User's control mechanism. In the event that the permittee subsequently determines that a waived pollutant is present or is expected to be present in the Industrial User's wastewater based on changes that occur in the User's operations, the permittee must immediately begin at least annual effluent monitoring of the User's Discharge and inspection.

(b) Where the permittee has determined that an Industrial User meets the criteria for classification as a Non-Significant Categorical Industrial User, the permittee must evaluate, at least once per year, whether an Industrial User continues to meet the criteria in §403.3(v)(2).

(c) In the case of Industrial Users subject to reduced reporting requirements under §403.12(e)(3), the permittee must randomly sample and analyze the effluent from Industrial Users and conduct inspections at least once every two years. If the Industrial User no longer meets the conditions for reduced reporting in §403.12(e)(3), the permittee must immediately begin sampling and inspecting the Industrial User at least once a year.

Industrial User Self Monitoring and Other Reports

The permittee shall receive and analyze self-monitoring and other reports submitted by industrial users as required by §403.8(f)(2)(iv) and §403.12(b),(d),(e),(g) and (h). Significant Industrial User reports must include Best Management Practice (BMP) compliance information per §403.12(b), (e), (h), where appropriate.

Industrial User Monitoring in Lieu of Self-Monitoring

Where the permittee elects to conduct monitoring of an industrial user in lieu of requiring self-monitoring, the permittee shall gather all information which would otherwise have been submitted by the user. The permittee shall also perform the sampling and analyses in accordance with the protocols established for the user; and, must follow the requirements in 40 CFR §403.12(g)(2) if repeat sampling is required as the result of any sampling violation(s).

Sample Collection and Analysis

Sample collection and analysis, and the gathering of other compliance data, shall be performed with sufficient care to produce evidence admissible in enforcement proceedings or in judicial actions. Unless specified



otherwise by the Director in writing, all sampling and analyses shall be performed in accordance with 40 CFR Part 136.

8. Slug Control Plans

The permittee is required to evaluate whether each Significant Industrial User needs a slug control plan or other action to control Slug Discharges. Industrial Users identified as significant after October 14, 2005, must be evaluated within 1 year of being designated a Significant Industrial User. A Slug Discharge is any Discharge of a non-routine, episodic nature, including but not limited to an accidental spill or a non-customary batch Discharge, which has a reasonable potential to cause Interference or Pass Through, or in any other way violate the permittee's regulations, local limits or conditions of this Permit. The results of such activities shall be available to the Approval Authority upon request. The permittee shall require Significant Industrial Users to immediately notify the permittee of any changes at its facility affecting potential for a Slug Discharge. If the permittee determines that a slug control plan is needed, the requirements to control Slug Discharges shall be incorporated into the significant industrial user's control mechanism, and the plan shall contain, at a minimum, the following elements:

- (a) Description of discharge practices, including non-routine batch Discharges;
- (b) Description of stored chemicals;
- (c) Procedures for immediately notifying the permittee of Slug Discharges, including any Discharge that would violate a prohibition under §403.5(b) with procedures for follow-up written notification within five days; and,
- (d) If necessary, procedures to prevent adverse impact from accidental spills, including inspection and maintenance of storage areas, handling and transfer of materials, loading and unloading operations, control of plant site run-off, worker training, building of containment structures or equipment, measures for containing toxic organic pollutants (including solvents), and/or measures and equipment for emergency response;

9. Enforcement

The permittee shall identify all violations of the industrial user's permit or local ordinance. The permittee shall investigate all such instances of industrial user noncompliance and shall take all necessary steps to return users to compliance. The permittee's enforcement actions shall follow its approved Legal Authorities (i.e. Ordinance, etc.) and Enforcement Response Plan developed in accordance with 40 CFR § 403.8(f)(5).

10. Public Participation (significant noncompliance)

The permittee shall publish annual notification in a newspaper(s) of general circulation that provides meaningful public notice within the jurisdiction(s) served by the permittee of industrial users which, at any time during the previous 12 months, were in significant noncompliance with applicable Pretreatment requirements. For the purposes of this requirement, an industrial user is in significant noncompliance if it meets one or more of the criteria listed in 40 CFR 403.8(f)(2)(viii).

11. Data and Information Management

The permittee must develop and maintain a data management system designed to track the status of the industrial user inventory, discharge characteristics, and compliance. In accordance with 40 CFR § 403.12(o), the delegated program shall retain all records relating to pretreatment program activities for a minimum of three years, and shall make such records available to the Department and USEPA upon request. The permittee shall also provide public access to information considered effluent data under 40 CFR Part 2.

12. Annual Pretreatment Program Report

The permittee shall submit by March 31 of each year, a complete report that describes the pretreatment program activities during the previous calendar year pursuant to 40 CFR §403.12(h). The content and format of this report shall be as established by the Department. Reports submitted to the DEQ by the permittee must be signed by a principal executive officer, ranking elected official or other duly authorized employee. The duly authorized employee must be an individual or position having responsibility for the overall operation of the facility or the Pretreatment Program. This authorization must be made in writing by the principal executive officer or ranking elected official, and submitted to the Approval Authority prior to or together with the report being submitted.

13. Pretreatment Program Modifications

The permittee shall submit in writing to the Department a statement of the basis for any proposed modification of its approved program and a description of the proposed modification in accordance with 40 CFR § 403.18. No substantial program modifications may be implemented by the delegated program prior to receiving written authorization from the Department. This Schedule incorporates, by reference, all substantial and non-substantial pretreatment program modifications approved by the Department prior to NPDES permit re-issuance.

## **SCHEDULE F**

### **NPDES GENERAL CONDITIONS – DOMESTIC FACILITIES**

#### **SECTION A. STANDARD CONDITIONS**

1. **Duty to Comply with Permit**

The permittee must comply with all conditions of this permit. Failure to comply with any permit condition is a violation of Oregon Revised Statutes (ORS) 468B.025 and the federal Clean Water Act and is grounds for an enforcement action. Failure to comply is also grounds for the Department to terminate, modify and reissue, revoke, or deny renewal of a permit.

2. **Penalties for Water Pollution and Permit Condition Violations**

The permit is enforceable by DEQ or EPA, and in some circumstances also by third-parties under the citizen suit provisions 33 USC §1365. DEQ enforcement is generally based on provisions of state statutes and EQC rules, and EPA enforcement is generally based on provisions of federal statutes and EPA regulations.

ORS 468.140 allows the Department to impose civil penalties up to \$10,000 per day for violation of a term, condition, or requirement of a permit. The federal Clean Water Act provides for civil penalties not to exceed \$32,500 and administrative penalties not to exceed \$11,000 per day for each violation of any condition or limitation of this permit.

Under ORS 468.943, unlawful water pollution, if committed by a person with criminal negligence, is punishable by a fine of up to \$25,000, imprisonment for not more than one year, or both. Each day on which a violation occurs or continues is a separately punishable offense. The federal Clean Water Act provides for criminal penalties of not more than \$50,000 per day of violation, or imprisonment of not more than 2 years, or both for second or subsequent negligent violations of this permit.

Under ORS 468.946, a person who knowingly discharges, places, or causes to be placed any waste into the waters of the state or in a location where the waste is likely to escape into the waters of the state is subject to a Class B felony punishable by a fine not to exceed \$200,000 and up to 10 years in prison. The federal Clean Water Act provides for criminal penalties of \$5,000 to \$50,000 per day of violation, or imprisonment of not more than 3 years, or both for knowing violations of the permit. In the case of a second or subsequent conviction for knowing violation, a person shall be subject to criminal penalties of not more than \$100,000 per day of violation, or imprisonment of not more than 6 years, or both.

3. **Duty to Mitigate**

The permittee must take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment. In addition, upon request of the Department, the permittee must correct any adverse impact on the environment or human health resulting from noncompliance with this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

4. **Duty to Reapply**

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and have the permit renewed. The application must be submitted at least 180 days before the expiration date of this permit.

The Department may grant permission to submit an application less than 180 days in advance but no later than the permit expiration date.

5. **Permit Actions**

This permit may be modified, revoked and reissued, or terminated for cause including, but not limited to, the following:

- a. Violation of any term, condition, or requirement of this permit, a rule, or a statute
- b. Obtaining this permit by misrepresentation or failure to disclose fully all material facts
- c. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge
- d. The permittee is identified as a Designated Management Agency or allocated a wasteload under a Total Maximum Daily Load (TMDL)

- e. New information or regulations
- f. Modification of compliance schedules
- g. Requirements of permit reopener conditions
- h. Correction of technical mistakes made in determining permit conditions
- i. Determination that the permitted activity endangers human health or the environment
- j. Other causes as specified in 40 CFR 122.62, 122.64, and 124.5

The filing of a request by the permittee for a permit modification, revocation or reissuance, termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

6. Toxic Pollutants

The permittee must comply with any applicable effluent standards or prohibitions established under Oregon Administrative Rules (OAR) 340-041-0033 and 307(a) of the federal Clean Water Act for toxic pollutants, and with standards for sewage sludge use or disposal established under Section 405(d) of the Clean Water Act, within the time provided in the regulations that establish those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

7. Property Rights and Other Legal Requirements

The issuance of this permit does not convey any property rights of any sort, or any exclusive privilege, or authorize any injury to persons or property or invasion of any other private rights, or any infringement of federal, tribal, state, or local laws or regulations.

8. Permit References

Except for effluent standards or prohibitions established under Section 307(a) of the federal Clean Water Act and OAR 340-041-0033 for toxic pollutants, and standards for sewage sludge use or disposal established under Section 405(d) of the Clean Water Act, all rules and statutes referred to in this permit are those in effect on the date this permit is issued.

9. Permit Fees

The permittee must pay the fees required by Oregon Administrative Rules.

**SECTION B. OPERATION AND MAINTENANCE OF POLLUTION CONTROLS**

1. Proper Operation and Maintenance

The permittee must at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems that are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

2. Need to Halt or Reduce Activity Not a Defense

For industrial or commercial facilities, upon reduction, loss, or failure of the treatment facility, the permittee must, to the extent necessary to maintain compliance with its permit, control production or all discharges or both until the facility is restored or an alternative method of treatment is provided. This requirement applies, for example, when the primary source of power of the treatment facility fails or is reduced or lost. It is not a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

3. Bypass of Treatment Facilities

a. Definitions

- (1) "Bypass" means intentional diversion of waste streams from any portion of the treatment facility. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, provided the diversion is to allow essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs b. and c. of this section.
- (2) "Severe property damage" means substantial physical damage to property, damage to the treatment facilities or treatment processes that causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

b. Prohibition of bypass.

- (1) Bypass is prohibited and the Department may take enforcement action against a permittee for bypass unless:
  - i. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
  - ii. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventative maintenance; and
  - iii. The permittee submitted notices and requests as required under General Condition B.3.c.
- (2) The Department may approve an anticipated bypass, after considering its adverse effects and any alternatives to bypassing, when the Department determines that it will meet the three conditions listed above in General Condition B.3.b.(1).
- c. Notice and request for bypass.
  - (1) Anticipated bypass. If the permittee knows in advance of the need for a bypass, a written notice must be submitted to the Department at least ten days before the date of the bypass.
  - (2) Unanticipated bypass. The permittee must submit notice of an unanticipated bypass as required in General Condition D.5.

4. Upset

- a. Definition. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operation error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventative maintenance, or careless or improper operation.
- b. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of General Condition B.4.c are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
- c. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset must demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
  - (1) An upset occurred and that the permittee can identify the causes(s) of the upset;
  - (2) The permitted facility was at the time being properly operated;
  - (3) The permittee submitted notice of the upset as required in General Condition D.5, hereof (24-hour notice); and,
  - (4) The permittee complied with any remedial measures required under General Condition A.3 hereof.
- d. Burden of proof. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

5. Treatment of Single Operational Upset

For purposes of this permit, A Single Operational Upset that leads to simultaneous violations of more than one pollutant parameter will be treated as a single violation. A single operational upset is an exceptional incident that causes simultaneous, unintentional, unknowing (not the result of a knowing act or omission), temporary noncompliance with more than one Clean Water Act effluent discharge pollutant parameter. A single operational upset does not include Clean Water Act violations involving discharge without a NPDES permit or noncompliance to the extent caused by improperly designed or inadequate treatment facilities. Each day of a single operational upset is a violation.

6. Overflows from Wastewater Conveyance Systems and Associated Pump Stations

- a. Definitions
  - (1) "Overflow" means any spill, release or diversion of sewage including:
    - i. An overflow that results in a discharge to waters of the United States; and
    - ii. An overflow of wastewater, including a wastewater backup into a building (other than a backup caused solely by a blockage or other malfunction in a privately owned sewer or building lateral), even if that overflow does not reach waters of the United States.
- b. Prohibition of storm related overflows. Storm related overflows of raw sewage are prohibited to waters of the State. However, the Environmental Quality Commission (EQC) recognizes that it is impossible to design and construct a conveyance system that will prevent overflows under all storm conditions. The State of Oregon has determined that all wastewater conveyance systems should be designed to transport storm events up to a specific size to the treatment facility. Therefore, such storm related overflows will not be considered a violation of this prohibition if:
  - (1) The permittee has conveyance and treatment facilities adequate to prevent overflows except during a storm event greater than the one-in-five-year, 24-hour duration storm from November 1 through May 21 and except during a storm event greater than the one-in-ten-year, 24-hour duration storm from May 22 through October

31. However, overflows during a storm event less than the one-in-five-year, 24-hour duration storm from November 1 through May 21 are also not permit violations if the permittee had separate sanitary and storm sewers on January 10, 1996, had experienced sanitary sewer overflows due to inflow and infiltration problems, and has submitted an acceptable plan to the Department to address these sanitary sewer overflows by January 1, 2010;

- (2) The permittee has provided the highest and best practicable treatment and/or control of wastes, activities, and flows and has properly operated the conveyance and treatment facilities in compliance with General Condition B.1.;
  - (3) The permittee has minimized the potential environmental and public health impacts from the overflow; and
  - (4) The permittee has properly maintained the capacity of the conveyance system.
- c. Prohibition of other overflows. Overflows other than stormwater related overflows (discussed in General Condition B.6.b. above) are prohibited unless:
- (1) Overflows were unavoidable to prevent loss of life, personal injury, or severe property damage;
  - (2) There were no feasible alternatives to the overflows, such as the use of auxiliary conveyance systems, or maximization of conveyance system storage.
- d. Reporting required. All overflows and uncontrolled overflows must be reported orally to the Department within 24 hours from the time the permittee becomes aware of the overflow. Reporting procedures are described in more detail in General Condition D.5.

7. Public Notification of Effluent Violation or Overflow

If effluent limitations specified in this permit are exceeded or an overflow occurs that threatens public health, the permittee must take such steps as are necessary to alert the public, health agencies and other affected entities (e.g., public water systems) about the extent and nature of the discharge in accordance with the notification procedures developed in accordance with General Condition B.8. Such steps may include, but are not limited to, posting of the river at access points and other places, news releases, and paid announcements on radio and television.

8. Emergency Response and Public Notification Plan

The permittee must develop and implement an emergency response and public notification plan that identifies measures to protect public health from overflows, bypasses or upsets that may endanger public health. At a minimum the plan must include mechanisms to:

- a. Ensure that the permittee is aware (to the greatest extent possible) of such events;
- b. Ensure notification of appropriate personnel and ensure that they are immediately dispatched for investigation and response;
- c. Ensure immediate notification to the public, health agencies, and other affected public entities (including public water systems). The overflow response plan must identify the public health and other officials who will receive immediate notification;
- d. Ensure that appropriate personnel are aware of and follow the plan and are appropriately trained;
- e. Provide emergency operations; and
- f. Ensure that DEQ is notified of the public notification steps taken.

9. Removed Substances

Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters must be disposed of in such a manner as to prevent any pollutant from such materials from entering waters of the state, causing nuisance conditions, or creating a public health hazard.

## **SECTION C. MONITORING AND RECORDS**

1. Representative Sampling

Sampling and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples must be taken at the monitoring points specified in this permit, and shall be taken, unless otherwise specified, before the effluent joins or is diluted by any other waste stream, body of water, or substance. Monitoring points may not be changed without notification to and the approval of the Department.

2. Flow Measurements

Appropriate flow measurement devices and methods consistent with accepted scientific practices must be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices must be installed, calibrated and maintained to insure that the accuracy of the measurements is consistent with the accepted

capability of that type of device. Devices selected must be capable of measuring flows with a maximum deviation of less than  $\pm 10$  percent from true discharge rates throughout the range of expected discharge volumes.

3. Monitoring Procedures

Monitoring must be conducted according to test procedures approved under 40 CFR part 136, or in the case of sludge use and disposal, under 40 CFR part 503, unless other test procedures have been specified in this permit.

4. Penalties of Tampering

The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit may, upon conviction, be punished by a fine of not more than \$10,000 per violation, imprisonment for not more than two years, or both. If a conviction of a person is for a violation committed after a first conviction of such person, punishment is a fine not more than \$20,000 per day of violation, or by imprisonment of not more than four years, or both.

5. Reporting of Monitoring Results

Monitoring results must be summarized each month on a Discharge Monitoring Report form approved by the Department. The reports must be submitted monthly and are to be mailed, delivered or otherwise transmitted by the 15th day of the following month unless specifically approved otherwise in Schedule B of this permit.

6. Additional Monitoring by the Permittee

If the permittee monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 CFR part 136, or in the case of sludge use and disposal, under 40 CFR part 503, or as specified in this permit, the results of this monitoring must be included in the calculation and reporting of the data submitted in the Discharge Monitoring Report. Such increased frequency must also be indicated. For a pollutant parameter that may be sampled more than once per day (e.g., Total Chlorine Residual), only the average daily value must be recorded unless otherwise specified in this permit.

7. Averaging of Measurements

Calculations for all limitations that require averaging of measurements must utilize an arithmetic mean, except for bacteria which shall be averaged as specified in this permit.

8. Retention of Records

Records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities shall be retained for a period of at least five years (or longer as required by 40 CFR part 503). Records of all monitoring information including all calibration and maintenance records, all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit and records of all data used to complete the application for this permit shall be retained for a period of at least 3 years from the date of the sample, measurement, report, or application. This period may be extended by request of the Department at any time.

9. Records Contents

Records of monitoring information must include:

- a. The date, exact place, time, and methods of sampling or measurements;
- b. The individual(s) who performed the sampling or measurements;
- c. The date(s) analyses were performed;
- d. The individual(s) who performed the analyses;
- e. The analytical techniques or methods used; and
- f. The results of such analyses.

10. Inspection and Entry

The permittee must allow the Department or EPA upon the presentation of credentials to:

- a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit, and
- d. Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by state law, any substances or parameters at any location.

11. Confidentiality of Information

Any information relating to this permit that is submitted to or obtained by DEQ is available to the public unless classified as confidential by the Director of DEQ under ORS 468.095. The Permittee may request that information be classified as confidential if it is a trade secret as defined by that statute. The name and address of the permittee, permit applications, permits, effluent data, and information required by NPDES application forms under 40 CFR 122.21 will not be classified as confidential. 40 CFR 122.7(b).

**SECTION D. REPORTING REQUIREMENTS**

1. Planned Changes

The permittee must comply with OAR chapter 340, division 52, "Review of Plans and Specifications" and 40 CFR Section 122.41(l) (1). Except where exempted under OAR chapter 340, division 52, no construction, installation, or modification involving disposal systems, treatment works, sewerage systems, or common sewers may be commenced until the plans and specifications are submitted to and approved by the Department. The permittee must give notice to the Department as soon as possible of any planned physical alternations or additions to the permitted facility.

2. Anticipated Noncompliance

The permittee must give advance notice to the Department of any planned changes in the permitted facility or activity that may result in noncompliance with permit requirements.

3. Transfers

This permit may be transferred to a new permittee provided the transferee acquires a property interest in the permitted activity and agrees in writing to fully comply with all the terms and conditions of the permit and the rules of the Commission. No permit may be transferred to a third party without prior written approval from the Department. The Department may require modification, revocation, and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under 40 CFR Section 122.61. The permittee must notify the Department when a transfer of property interest takes place.

4. Compliance Schedule

Reports of compliance or noncompliance with, or any progress reports on interim and final requirements contained in any compliance schedule of this permit must be submitted no later than 14 days following each schedule date. Any reports of noncompliance must include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirements.

5. Twenty-Four Hour Reporting

The permittee must report any noncompliance that may endanger health or the environment. Any information must be provided orally (by telephone) to DEQ or to the Oregon Emergency Response System (1-800-452-0311) as specified below within 24 hours from the time the permittee becomes aware of the circumstances.

a. Overflows.

(1) Oral Reporting within 24 hours.

- i. The following information must be reported to the Oregon Emergency Response System (OERS) at 1-800-452-0311:
  - a) The location of the overflow;
  - b) The receiving water (if there is one);
  - c) An estimate of the volume of the overflow;
  - d) A description of the sewer system component from which the release occurred (e.g., manhole, constructed overflow pipe, crack in pipe); and
  - e) The estimated date and time when the overflow began and stopped or will be stopped.
- ii. The following information must be reported to the Department's Regional office within 24 hours, or during normal business hours, whichever is first:
  - a) The OERS incident number along with a brief description of the event.

(2) Written reporting within 5 days.

- i. The following information must be provided in writing to the Department's Regional office within 5 days of the time the permittee becomes aware of the overflow:



- a) The OERS incident number;
- b) The cause or suspected cause of the overflow;
- c) Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the overflow and a schedule of major milestones for those steps;
- d) Steps taken or planned to mitigate the impact(s) of the overflow and a schedule of major milestones for those steps; and
- e) (for storm-related overflows) The rainfall intensity (inches/hour) and duration of the storm associated with the overflow.

The Department may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

b. Other instances of noncompliance.

(1) The following instances of noncompliance must be reported:

- i. Any unanticipated bypass that exceeds any effluent limitation in this permit;
- ii. Any upset that exceeds any effluent limitation in this permit;
- iii. Violation of maximum daily discharge limitation for any of the pollutants listed by the Department in this permit; and
- iv. Any noncompliance that may endanger human health or the environment.

(2) During normal business hours, the Department's Regional office must be called. Outside of normal business hours, the Department must be contacted at 1-800-452-0311 (Oregon Emergency Response System).

(3) A written submission must be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission must contain:

- i. A description of the noncompliance and its cause;
- ii. The period of noncompliance, including exact dates and times;
- iii. The estimated time noncompliance is expected to continue if it has not been corrected;
- iv. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance; and
- v. Public notification steps taken, pursuant to General Condition B.7

(4) The Department may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

(5) If the permittee is establishing an affirmative defense of upset or bypass to any offense under ORS 468.922 to 468.946, delivered written notice must be made to the Department or other agency with regulatory jurisdiction within 4 (four) calendar days of the time the permittee becomes aware of the circumstances.

6. Other Noncompliance

The permittee must report all instances of noncompliance not reported under General Condition D.4 or D.5, at the time monitoring reports are submitted. The reports must contain:

- a. A description of the noncompliance and its cause;
- b. The period of noncompliance, including exact dates and times;
- c. The estimated time noncompliance is expected to continue if it has not been corrected; and
- d. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

7. Duty to Provide Information

The permittee must furnish to the Department within a reasonable time any information that the Department may request to determine compliance with the permit or to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit. The permittee must also furnish to the Department, upon request, copies of records required to be kept by this permit.

Other Information: When the permittee becomes aware that it has failed to submit any relevant facts or has submitted incorrect information in a permit application or any report to the Department, it must promptly submit such facts or information.

8. Signatory Requirements

All applications, reports or information submitted to the Department must be signed and certified in accordance with 40 CFR Section 122.22.

9. Falsification of Information

Under ORS 468.953, any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of

compliance or noncompliance, is subject to a Class C felony punishable by a fine not to exceed \$100,000 per violation and up to 5 years in prison. Additionally, according to 40 CFR 122.41(k)(2), any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a federal civil penalty not to exceed \$10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.

10. Changes to Indirect Dischargers

The permittee must provide adequate notice to the Department of the following:

- a. Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to section 301 or 306 of the Clean Water Act if it were directly discharging those pollutants and;
- b. Any substantial change in the volume or character of pollutants being introduced into the POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.
- c. For the purposes of this paragraph, adequate notice shall include information on (i) the quality and quantity of effluent introduced into the POTW, and (ii) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

**SECTION E. DEFINITIONS**

1. *BOD* means five-day biochemical oxygen demand.
2. *CBOD* means five day carbonaceous biochemical oxygen demand.
3. *TSS* means total suspended solids.
4. "*Bacteria*" includes but is not limited to fecal coliform bacteria, total coliform bacteria, and *E. coli* bacteria.
5. *FC* means fecal coliform bacteria.
6. *Total residual chlorine* means combined chlorine forms plus free residual chlorine
7. *Technology based permit effluent limitations* means technology-based treatment requirements as defined in 40 CFR Section 125.3, and concentration and mass load effluent limitations that are based on minimum design criteria specified in OAR Chapter 340, Division 41.
8. *mg/l* means milligrams per liter.
9. *kg* means kilograms.
10. *m<sup>3</sup>/d* means cubic meters per day.
11. *MGD* means million gallons per day.
12. *24-hour Composite sample* means a combination of at least six discrete sample aliquots of at least 100 milliliters, collected at periodic intervals from the same location, during the operating hours of the facility over a 24 hour period. Four (rather than six) aliquots should be collected for volatile organics analyses. The composite must be flow or time proportional, whichever is more appropriate. The sample aliquots must be collected and stored in accordance with procedures prescribed in the most recent edition of *Standard Methods for the Examination of Water and Wastewater*.
13. *Grab sample* means an individual discrete sample collected over a period of time not to exceed 15 minutes.
14. *Quarter* means January through March, April through June, July through September, or October through December.
15. *Month* means calendar month.
16. *Week* means a calendar week of Sunday through Saturday.
17. *POTW* means a publicly owned treatment works